

UNIVERSITY OF PENNSYLVANIA.

ADDRESSES

DELIVERED AT THE OPENING

OF THE

GRADUATE DEPARTMENT FOR WOMEN,

ON

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OPENING REMARKS BY REV. WM. H. FURNESS.

LADIES AND GENTLEMEN: I take it for granted that you all know what the present occasion is; if any of you do not, they who are coming after me, but who are before me, are to address you, and you will go hence well instructed. You need no words of mine. I avow myself an optimist, and I am an optimist because I believe in Christianity, and that there is in it a divine spirit immortal and all-powerful. There is no form of our religion that is not tempered by it, by a spirit that unites us all in every good work. The spirit is one; its forms are various and numberless. At this season when I look abroad and observe the infinite variety pervading the beauty of the spring-time, I am inclined to believe that the good God loves variety in the spiritual world as well as in the physical.

To solve the abounding mysteries of nature and of life that challenge our curiosity and provoke the thirst for knowledge, we need to stimulate all the intelligence, all the intellect, there is in the world, of both men and women. Women are proving their power in science and literature. I am sure you will all join with me in an unuttered prayer for the success of the present movement, and for whatever aids the progress of the world.

ADDRESS BY JAMES MAC ALISTER, ESQ.

The occasion which has brought us together this afternoon renders this one of the most important days in the history of the University. Many changes have taken place during the century of its existence, but none of these can ever exercise so wide and far-reaching an influence as the new departure we are now entering upon. Nothing in the wonderful progress of civilization during the past fifty years is more striking than the advance which has been made in the social, economic, and

political condition of women. The larger opportunities for education have not been the least of the privileges brought within her reach ; and it would hardly be possible, I think, to exaggerate the important results to society which this change is destined to produce. How large a part the higher schools of Europe and our own country have taken in this movement has been clearly and impressively set forth by Dean Thomas ; and it cannot but give cause for congratulation to every friend of our own University that its doors have also been opened to women. After listening to Miss Thomas's account of what has already been done for the higher education of women, no one can harbor a suspicion that there is anything revolutionary in this step. She has made it apparent that we are simply falling into line with the leading institutions of learning, the world over. We have sometimes reason enough to be impatient with the conservatism that so strongly intrenches itself in educational traditions and customs ; but surely we are quite safe in following the example of universities that were old before the sacred fire of learning was carried to American shores. For one, I feel certain that the establishment of this new department will liberalize and expand the whole academic spirit of the University ; it will give it larger aims and ideals to follow ; it will bring it into closer touch with the best thought of to-day, and thereby strengthen its claims upon the sympathy and support of the community.

While we must, therefore, regard the action taken to-day as of great significance in considering the future of the University, I must be frank in saying that it seems to me to be only the first step in the extension of its privileges to women. We cannot stop here. The logical sequence to graduate study for women is the establishment of similar opportunities for undergraduate work. In saying this I am giving expression to a purely personal opinion ; and, furthermore, I must not be understood as referring to co-education in the sense of opening the undergraduate schools, as now constituted, to young women. As Miss Thomas has so admirably pointed out, the question of providing college education for girls is to be considered altogether apart from that of admitting them to the older colleges which were

founded for young men. There is room for differences of opinion on the subject of co-education ; but, situated as the University of Pennsylvania is, in a great city, there seems every reason why its advantages should be available to the women as well as the men who live under its shadow. The graduate department of every university implies the undergraduate college from which the students to a considerable extent must be drawn. If the former is right in our own case, the latter will be justifiable when the conditions for its existence are present. It is almost wholly a question of ways and means. When the necessity arises and some generous citizen is ready with an adequate endowment, no doubt the University will find a way to give women the privileges of the various schools which it has taken several generations to call into being, and which are steadily rising into greater usefulness and distinction.

Dean Thomas has covered the ground so fully in her address that it would be a waste of words to add another word ; but one or two matters have occurred to me, while listening to her, which, I think, have an important bearing upon the subject and emphasize some of the points that have been made.

In the first place, it is worth while to consider for a moment what an important bearing the higher education of women must have upon the general education of the country. In the United States elementary education is very largely in the hands of women. The same is true of the secondary schools, to a lesser extent. Taking the country as a whole, about sixty-five per cent. of the teaching body are women. If the larger cities are taken separately, ninety per cent. of the teachers will be found to be women. Of the twenty-seven hundred teachers employed in the public schools of Philadelphia, less than one hundred are men. Of course, it is not to be expected that all the teachers engaged in giving elementary instruction should be college-bred ; but it must be remembered that a considerable proportion of the whole number occupy directive and controlling positions as principals, in which the training and culture of a liberal education could not fail to tell upon the quality of the work. One of the greatest drawbacks in public school administration is the low standards which are set up for the

qualification of teachers. In European countries the requirements for a principal are much higher than with us. It is likely that large numbers of women will continue to seek employment in a field which is so widely opened to them and in which they are so well fitted to succeed. As the number of college graduates increases, no doubt a goodly share of them will find their way into the schools, and the presence of such women will certainly serve to raise the tone and character of the education which is subject to their direction.

The present seems to be an opportune time for calling attention to another matter connected with this occasion. Any consideration of college education for women at once raises the question of preparatory schools. Indeed, one of the greatest difficulties colleges of all kinds have to deal with is the relation they sustain to high schools and academies. The establishment of Bryn Mawr College has called into existence in Philadelphia a number of private schools which are gradually adapting themselves to its requirements for admission; but the public-school system has still no secondary school where a girl can get the preparation leading to a college education. In this respect we are behind nearly every city of any importance throughout the greater part of the country. In even the smaller towns of New England and the Middle and Northwestern States, the high school offers a course of instruction to its boys and girls that leads directly to the college. In Philadelphia the public schools refuse to open the way for a girl who aspires to a higher education. I speak of this now because a new girls' secondary school has been projected in which provision might be made for the studies that are connected with a college curriculum. In this city we are spending \$3,000,000 a year on the public schools, and surely some of this amount might be diverted to this end. No narrow horizon should bound the education which a community provides for its children. The ideal system is that which begins with the kindergarten and leads to the university.

I have alluded to the advance which the opening of the Women's Graduate Department marks in the history of the University. I must remind you that it is but one of the evi-

dences of the progress it is making in all directions. The past ten years have witnessed a growth and development in the University of Pennsylvania which should be a source of pride to every citizen of Philadelphia. For all this we have largely to thank the Provost. He has labored to promote the interests of the University with unselfish devotion; and he is entitled to the respect and honor which should attend achievements of so much moment to the ancient and honorable institution of learning over which he presides with such distinguished success.

ADDRESS BY DR. M. CAREY THOMAS.

I have been asked on the occasion of this formal opening to women of the graduate department of the University of Pennsylvania, to say a few words on the subject of the higher education of women; and I have accepted the invitation of your Provost and Board of Trustees with the greater pleasure because to us at Bryn Mawr the higher education of women seems of supreme importance; and because to us who have among us an ever increasing number of the girls and young women of Philadelphia, the opening of the University of Pennsylvania cannot but be a matter of the liveliest interest and satisfaction.

There can be, I think, no more fitting time to enumerate the triumphs of woman's education, for the last decades of the nineteenth century have been, to those who desire a world of wise women as well as fair ones, like those days in spring when we can still note with affection the separate blossoms and distinguish the first comers from the last; already the blossoms are hard to count, and the May day sun of the Twentieth Century is on the horizon.

Ascending the map of Europe, northward, we first find ourselves in Spain and Italy, and in these Latin countries we find what was to be expected from the generous Latin accessibility to ideas and the equally generous Latin readiness in realizing them. The ten universities of Spain are not only now open

but have never, it is said, been closed, to women. The seventeen universities of Italy, many of them, like those of Spain, never really closed to women, were formally opened by the Italian Minister of Education in 1876, and last year the first girls gymnasium was founded in Rome. Indeed, as early as 1116, when the great jurist Irnerius created at Bologna the greatest law school and one of the greatest universities of the Middle Ages, he founded it without distinction of sex. Many women were enrolled among the ten thousand students that yearly thronged its halls, many received degrees, and a long line of famous women filled professors' chairs in the university. To-day an Italian woman holds a professorship in the medical school and lectures to audiences of men.

France, the foremost Latin nation, stands foremost also in the education of women. In Paris the great schools of the Collège de France and the Sorbonne have been open to women for many years, one hundred and nine degrees being conferred on women between the years 1866 and 1882 alone.

Moreover, French women are not expected to prepare themselves for this higher education without assistance. It is one of the glories of the French Republic that France has been the first country in Europe to make munificent provision for the secondary education of women. Immediately upon the fall of the Empire, in 1871, there was passed "in the interest of the future greatness of France" a bill providing a certain number of lyceums for girls, for "on women," it was urged in the Chamber of Deputies, "depends the greatness or decay of nations." There are now in different parts of France fifty-one girls' lyceums or colleges supported by the government, where girls can be prepared for the Baccalaureate degree.

Switzerland, as becomes a republic, grants all its advantages of secondary and advanced education to women and men alike. Zurich has admitted women since 1868, and has been followed in this by all the other universities of Switzerland, as each in turn has come to recognize the wisdom of her course. In the present year she has taken another and most important step, which reminds us of the liberality of the University of Bologna, and here again she has in all likelihood led the way for her

sister universities. She has included women among her recognized instructors. After an impassioned debate in the Faculty Dr. Emily Kempin has been allowed to begin a course of lectures on law.

The other European countries need not detain us long. Women are freely admitted to all the degrees, and to all the instruction, of the universities of Holland, Belgium, Sweden, Denmark, Finland, and Norway, the last country to admit women, Norway, having passed a law to that effect in 1882 in response to the first application ever made by a woman for admission to the University of Christiania.

Omitting Bohemia and Hungary, where the subject is still agitated, Russia, where the universities are sometimes open to women and sometimes shut, and Servia, Bulgaria, and Greece, where the education of men is not yet completely organized, we reach Germany and Austria. In Austria the universities were unofficially open to women by the decree of 1878, under which they were denied degrees, or even any official certificate of attendance, but were permitted to hear the lectures of any professor that might choose to admit them. This left-handed admission has proved of immense advantage to women wishing to study in the great medical school of Vienna.

Germany remains to be considered; and there are, I think, two explanations of the apparent anomaly that the country where learning and university study are held most dear should close against its women the doors of its twenty-one universities. One reason may be sought in the position of women in Germany, which, if I may venture to judge from a three years' residence among them, and from what they themselves say, differs from their position in other European countries. The other and more potent cause lies in the struggle for the means of existence, a struggle nowhere so fierce as in Germany among the members of the learned professions. Were the government to found women's gymnasia and confer on women university degrees, it would thereby open to them many lucrative positions from which their lack of training now excludes them, posts eagerly competed for by more men than can obtain them, posts, moreover, that women would be almost sure

of obtaining, because in other countries they are held by women. In Prussia alone, for example, ninety-two per cent. of the endowed public schools for girls are said to be in the hands of men.

Nevertheless, learning is too sacred to the German scholar for him willingly to refuse it even to a woman if she in person entreats for it; and thus it happens that Leipzig, next to Berlin perhaps the largest university in Germany, with a roll-call of three thousand students, has been informally open for many years. I studied there from 1879 to 1881, and women had studied there before; only last year two graduates of Bryn Mawr were again admitted. But this admission is by favor, not by right, being in fact against the law. Within a few weeks the fate of all the women studying in the university trembled in the balance, until it was understood that the new Saxon Minister of Education, Von Seydewitz, had promised to follow the example of his predecessor in ignoring the law-breaking propensities of the Leipzig professors. By favor, too, a woman has this year obtain admission to certain lectures in the University of Berlin, the high place of Prussian conservatism. She is an American, last year's Fellow in Mathematics at Bryn Mawr. The rector of the university chanced to be himself a great mathematician and knew not how to refuse a fellow student the opportunity to hear his lectures. Even in Germany, however, the old order is giving place to new, for three months ago, in February, the Grand Duke of Baden and his ministry declared themselves in favor of opening to women the universities of the Duchy of Baden, the great universities that is, of Freiburg and Heidelberg; and this decree was favorably reported by the Diet.

Looking once more at the map, before crossing the Channel, we see that in every important country of Europe, except Germany and Austria, both university degrees and university instruction are open to women.

In England the first important step in the education of women was taken in 1869, the year after the opening of Zurich, when six women began to study at the University of Cambridge. In 1873 these women students found a permanent home in

Girton College, just outside of Cambridge, and in 1875 Newnham College opened in Cambridge itself. In 1879 both the Oxford colleges for women opened. In 1878 London University, the great examining university of England, opened to women all its examinations and degrees. But the great triumph was won in 1881, when the Senate of the University of Cambridge, by a vote of three hundred and ninety-eight to thirty-two, formally recognized the women's colleges by granting their students admission to the tripos examinations and publicly announcing the rank taken by women in these examinations. It is impossible to overestimate the importance to the cause of the higher education of women of this recognition; for the English tripos and honor examinations are the only university examinations in the world where the marks of candidates are counted and compared by a large number of examiners, and with mathematical exactness. Not only are the names of all who have passed the examinations in any given year published in classes of merit, but in some examinations the names within these several classes are ranked in order of excellence; and to be ranked at the head of the first class in the most difficult tripos is the proudest academic distinction in England. It differs very much from receiving, as at Harvard, the highest average of marks in any graduating class, for at Harvard the subjects of study may be different; or from taking a German Ph. D. *summa cum laude*, for in Germany the examinations are almost always different and no two candidates for the degree of Ph. D. are ever pitted against each other. It differs in still another respect—in no other examinations in England or elsewhere are all the most brilliant of the younger scholars of the land striving against each other. Toward this final examination, an examination lasting five successive days, have been directed all the teaching of the great public schools that prepare for the universities, and all the teaching of the tutors of the several colleges of the university; for on the number of firsts taken by the men of the college depends the reputation of the college. To this final test, then, all the powers of the man himself are bent up. If his nerve or memory fail him, it will mean loss of reputation for himself, his tutors, and

his college, and exclusion from the highest academic prizes in the gift of his university. I can conceive no more convincing proof of the power of women to endure prolonged intellectual strain than the fact that the women of Girton and Newnham, shut out as they are from the public schools of England, and thus handicapped in almost every case by inferior training, rank so high in these tripos examinations. Whatever objection may be brought against the English examination system we should be thankful that it exists to test and prove, as no other system in the world could test and prove, the equality for the purposes of academic training of men and women. A success like that of Miss Ramsay of Girton, in 1887, who came out not only senior classic of her year, but alone in the first division, all the men of the various colleges ranking below her by a whole division—a success never before achieved even by such men as Professor Jebb himself; or like that of Miss Fawcett of Newnham, in 1890, who outranked, it is said, by four hundred marks the senior wrangler in the mathematical tripos, a success more marvelous even than Miss Ramsay's, in that the mathematical tripos is the most difficult, and the senior wrangler of each year is one of the heroes of the hour, the academic lion of the London season. Successes like these ring through the land and carry conviction to every university man and to every educated man in England and her colonies.

Indirectly, too, these English examinations have rendered another and no less important service to the cause of women's education. We have heard much from certain medical men, never, I think, from medical women, of the danger to women pursuing serious studies of the loss of health. If the health of women remains unimpaired under an intellectual strain prolonged through three years and culminating in five days of examinations, in which the evils of excitement and of competition would seem to be at their height, we may surely conclude that the ghastly spectre of disease does not in very truth sit by our gate of knowledge. Now it so happens that the health statistics of these honor students are almost the only trustworthy statistics we possess. The health statistics of the graduates of our American colleges were compiled a few years

ago, in 1883, but the compilers took as the standard of comparison the health statistics of women working in factories; hereditary tendencies and differences of environment were ignored.

In 1890 Mrs. Sidgwick, president of Newnham College, the wife of Professor Sidgwick, of Cambridge, and the sister of Mr. Arthur Balfour, collected the health statistics of two hundred and sixty-nine of these tripos and honor students, and at the same time the health statistics of an equal number of their sisters or cousins that had never gone to college, selecting in every case the female relative nearest in age. It was shown that about six per cent. of the honor students were at that time in bad health, as against about eleven per cent of the others; of those who had married eighty-two per cent. were in good health as against sixty-two per cent. of their married sisters and cousins. It was even shown that there were fewer childless marriages among the honor students, and in these marriages fewer deaths of children.

Girton, Newnham, Somerville, and Lady Margaret are not yet well endowed, like the best Oxford and Cambridge colleges for men, and the technical degrees of B. A. and M. A., which would carry with them university fellowships and voting privileges in the university senate, are refused to women. But the infinitely more important privileges of university lectures, university tutors, and public competition are open. In Ireland the Royal Irish University and its affiliated colleges have been open for many years, and the Royal University has this year for the first time appointed two women on its staff of examiners. In Scotland women are admitted to the degrees and instruction of Edinburgh, and on the 14th of last March the University of St. Andrews, the next in importance to Edinburgh, and the oldest of all the Scotch universities, opened its lectures as well as its degrees to women. Broadly speaking, in England, Scotland, and Ireland women are excluded from none of the more important privileges of university education.

Crossing the Atlantic to America, we find that in Canada women are admitted on equal terms to the chief college of

Nova Scotia, Dalhousie, to the University of New Brunswick, in the Province of New Brunswick, and to the greatest university of Canada, Toronto, and its affiliated colleges, McMaster and Victoria. They are admitted also to the degrees, but not to the classes, of Trinity University and Queen's College in Ontario, and of McGill University, the leading university of Quebec. Everywhere in Canada, then, except in these three institutions, women are admitted without reserve both to university degrees and to university instruction.

In our own country we find that in each of the twenty Western States and in the territory of Utah, there is a university that is endowed in part, at least, by the United States Government, and that these State universities are, without exception, open to women on equal terms. It has been computed that of one hundred and ninety-five Western colleges conferring on women regular degrees in arts and sciences, one hundred and sixty-five are co-educational; the remaining thirty, which confer degrees on women only, being, with perhaps one exception, distinctly below the level of the true college. Scarcely less significant is the fact that in all this vast territory there are but twenty-five colleges for men only, and that these are, without exception, sectarian, being supported by the Roman Catholic, Protestant Episcopal, and Presbyterian Churches. The Presbyterian Church, however, supports fourteen co-educational colleges as against four separate colleges for men. In Michigan, Iowa, and Kansas there does not exist a single separate college for men. The West, then, is irrevocably committed to the education of women, and, furthermore, to what is called co-education. It has been committed to co-education only since 1870, the year in which Michigan, the greatest university of the West, was opened to women; in the same year, or in the next, all the State universities that had not before admitted women were opened to them, and all the State universities since organized have from the first been open. The two new Western universities, that promise to be the most richly endowed in all America, the Leland Stanford University in California, and the University of Chicago, make no distinction between men and women.

In the Southern States, where there are no separate colleges for women of collegiate grade, there are thirty-nine co-educational colleges and universities, among them most of the Southern colleges that are in a strict sense institutions for higher education—such as the State universities of Texas, Mississippi, Kentucky. The University of Virginia is, unfortunately, closed, the Vanderbilt University in Tennessee, which probably ranks next to the University of Virginia, has never, I believe, formally admitted women, although women have studied in its classes, and it claims never to have refused instruction or degrees to a woman. Tulane, the State university of Louisiana, gives degrees to women, but teaches them in separate classes. In these co-educational colleges of the South seven hundred and fifty women are studying; women are studying also in the Columbian University, the only university as yet existing in the District of Columbia. And it is announced that they will be admitted to the great new university to be founded in Washington by the Methodist Church.

The state of affairs in New England and the Middle States is more or less familiar to us all. In Maine, two of the three colleges of the State admit women, but Bowdoin, on the whole the most important, is closed; the colleges and universities of Vermont are open to women; in New Hampshire, Dartmouth, the sole college, is closed; in Connecticut, Wesleyan admits women, Trinity, an Episcopalian college, is closed to women, and within the last few months the great University of Yale has admitted them to all its graduate instruction, its second degrees, and its fellowships; in Rhode Island, the sole college, or rather university, Brown, has this year admitted women to its examinations, and, as I have heard from the president, in a letter received last week, will next year admit women to all its graduate work; in Massachusetts, Boston University and the Massachusetts Institute of Technology are open to women, the two smaller colleges of Amherst and Williams are closed, and Harvard, save in so far as it does not interfere with those of its professors who may choose to repeat to women the instruction given to men, is closed. In the State of New York one of the two most important institutions of learning, Cornell,

is open to women ; the degrees of Columbia, and to all intents and purposes its graduate department, are open to women ; in Delaware there is no important college or university ; in New Jersey but one, Princeton, which is closed to women ; in Maryland but one of real importance, the Johns Hopkins, which is closed except in so far as it is pledged to admit women to its medical school, which is to be essentially a graduate school. And in Pennsylvania I will not stop to enumerate the many other well-known colleges or universities ; the University of Pennsylvania, as every one knows who is here to-day, has opened to women its graduate department.

But our review of the education of women in the New England and Middle States is plainly incomplete. In these States are found not only colleges for men and women, and colleges for men alone, but also, what are nowhere else to be found in equal numbers and of equal importance, colleges for women alone. The question of women's education in these States is not, as in the West and South, simply a question of co-education or no education, it is also a question of co-education or separate education. And there is an obvious tendency to distinguish between graduate and undergraduate education.

In the matter of undergraduate education women themselves have expressed a marked preference for separate colleges. In the West, as we have seen, they have little or no choice ; in the East, where there is a choice, we find in the four best known colleges for women, in Vassar, Wellesley, Smith, and Bryn Mawr, no less than two thousand women ; and in co-educational institutions of such eminence as Cornell and the Massachusetts Institute of Technology, only one hundred and ninety-four women. Cornell admitted women in 1872, and had last year only a hundred and twenty-five women students ; Wellesley opened in 1875, three years later, and had last year seven hundred and three students. This marked preference of women for separate undergraduate education—its wisdom or unwisdom—is of the greatest moment to all those interested in the higher education of women. Other things equal, it seems to me that this preference is, on the whole, a wise one. But other things, as every one knows, have as yet been very

seldom equal; and wherever other things are unequal, this preference of women for separate education is, from the intellectual point of view, a real misfortune. Wherever there are not students enough or funds enough for the support of two institutions of equal excellence there should be, I think, co-education. Wherever there are, or can be, two institutions, both excellent and of equal excellence, there, I think, should be separate undergraduate education. But women have scarcely been careful enough to make sure that their separate institutions were really of equal excellence. That this is true in regard to schools every one knows. In the public schools of the State of Pennsylvania which are co-educational, girls are prepared for college; in Philadelphia, where the schools of boys and girls are separate, there are indeed excellent private schools for girls, but the girls that attend the public schools are excluded from college. It is no less true as regards colleges. Vassar, Wellesley, and Smith are admittedly the foremost of the earlier colleges for women. But at Smith six out of twenty-six professors and instructors have never taken a college degree; at Wellesley eighteen out of sixty professors and instructors have never taken a college degree, and five of these are full professors. Obviously an education conducted by instructors who have themselves pursued neither graduate nor even the ordinary undergraduate course of collegiate study, cannot but be an inferior education. It is in its recognition of the fact that there are as yet few colleges for women that maintain, or profess to maintain, the same standard as the best colleges for men, that the West has shown itself wiser than the East; it is in its attempt to provide for separate undergraduate education that the East has shown itself wiser than the West. But it is clearly the duty of the East to make sure that its undergraduate education for women is as good as that of the co-educational colleges of the West and as that of its own separate colleges for men. And if women's colleges are to be as good as the best colleges for men two things seem plain to me; one that they must not be annexes, where the instruction is repeated that has already been given to men; the other, that they must be graduate as well as

undergraduate institutions. They must not be annexes, because an annex is an institution in which the professors teach weekly for twenty or twenty-four hours. Every one knows that at one time the professors in American colleges taught as many hours as the teachers in our day-schools, and that in some smaller colleges they still teach as many hours. In our best colleges it has been found expedient to limit the number of hours to ten or twelve, on the ground that under no other circumstances was it possible for the professors themselves to keep pace with contemporary knowledge or pursue original research. This leisure is all important to the scholar; in the few cases I have known of in which eminent German professors have consented to give separate instruction to a woman, they have declined compensation on the ground that their time was worth more to them than gold; it is all important to the college, which by the very fact that the professors have no leisure must needs fall back into the class of those antiquated and inferior colleges; neither college nor professor can afford to sacrifice—to divide between the college and the annex—those golden hours of instruction.

And the best colleges for women, like the best colleges for men, must be graduate as well as undergraduate institutions, because the best professors will not be content without giving graduate instruction, and because of the infinite advantage of this association of graduate and undergraduate departments to the student who means to leave college after taking her first degree. Where there is a graduate department, undergraduate study is seen in its true perspective; it has constant reference to the future, and the same guidance that points out to the graduate student new themes of interest to be pursued in graduate study, points out to the undergraduate student new and continuous interests to be pursued through life. The undergraduate department, which is an end to itself, is too often narrow and stationary, too often a finishing school. The undergraduate department of a graduate institution is a beginning.

And the graduate departments of these really excellent colleges, whether they are colleges for men or colleges for women, should be open ultimately, I think, both to men and women.

For the distinction drawn in the East between undergraduate and graduate co-education is a wise one. The movement in favor of graduate co-education, which is being initiated by Yale and Brown and the University of Pennsylvania, seems to me in all respects a wise one. The social objections that may reasonably be brought against undergraduate co-education cannot reasonably be brought against graduate co-education. Undergraduate education is, in a certain sense, for the many; wherever there is money and leisure enough young men of fair abilities should, I think, be sent to college; and, wherever there is money and leisure enough, young women of fair abilities should, I think, be sent to college; and for such students the true college life, with its expansion, its freedom, its friendships, its time for study undisturbed by the responsibilities of life, or by the serious problems of love and marriage, can be found as yet only by women among women and by men among men. But graduate education is for the few; it is for those only who have completed the undergraduate course and to whom the higher education is either a profession or a passion. And such students as these may be trusted to meet life and its responsibilities wisely; such students as these have an indisputable claim to the instruction that they cannot obtain elsewhere. And they cannot obtain it elsewhere. Here lies the vital distinction between graduate and undergraduate study. Undergraduate instruction may to all intents and purposes be duplicated; museums, libraries, apparatus, however expensive, may be, and are slowly being, duplicated, but the highest instruction cannot be duplicated. One great specialist is not a substitute for another great specialist, and the graduate student will not be satisfied with one great specialist. Like the wandering students of the middle ages, the graduate students of our own day take staff and scrip and go on pilgrimage from one great teacher to another. And for the men and women bent upon such pilgrimage there should be many shrines, and all should be alike open.

I have dwelt so long on what seems to me the true line of development of the higher education of women because, so far as I can judge, the question with every one now is the

question of the right guidance of the movement of women's education; there is no one left to oppose it. In the twenty-six years since the opening of Vassar College, or in the twenty-four years since the opening of Zurich, it has spread itself, as we have seen, with resistless strength.

Our brief review has shown us that the action of the Trustees of the University of Pennsylvania is in entire accordance with the main course of thought and feeling in the modern world. They are honorably distinguished as among the first in our Eastern States to take part in this great movement, but they are in accord, not in opposition, with the world around them; they will have many imitators, and but few cavilers. The education of women is indeed a great change, but there has come to pass in respect to it what Burke described long ago: "If a great change is to be made in human affairs the minds of men will be fitted to it; the general opinions and feelings will draw that way. Every fear, every hope, will forward it, and then they who persist in opposing this mighty current in human affairs will appear rather to resist the decrees of Providence itself than the mere designs of men. They will not be resolute and firm, but perverse and obstinate;" and in America there have surely been very few perverse or obstinate.

CLOSING REMARKS BY PROVOST PEPPER.

I am sure the profound significance of the present occasion will not be lost to any of us. We have heard the wise and encouraging words of one whose rare gifts of head and heart have kept him in close touch for three-quarters of a century with the best that has been done for the elevation of humanity; we have heard the stirring and inspiring views of that keen, progressive man, who has so fitly been called to preside over the organization and development of the Drexel Institute, the establishment of which marks an epoch in the history of woman's education; and we have, with profound interest, listened to the thoughtful and weighty statements of the distinguished Dean of a sister college, which, in the few years of

its already conspicuous career, has come to be regarded as the leading exponent on this continent of the advanced education of women. The testimony of these great voices is concurrent and convincing. It is only necessary for me to state in briefest terms the attitude of the University of Pennsylvania upon this momentous question. The time has gone by when argument was needed to show that women are fitted for college education; that their physical condition is not affected unfavorably by it; or that their future lives in society are rendered by it otherwise than more rich, fruitful, and happy.

The problems of co-education, in the ordinary sense of that term, are largely solved. No one who pretends to know much of the current educational work of America dare question the statement that co-education may be conducted safely and effectively.

But equally is it recognized that each institution must be guided by its peculiar position and organization in deciding whether it should open its undergraduate classes to women students. In the case of the University of Pennsylvania the authorities have decided, after careful study of the entire question, that it is not expedient to do so. They have, however, announced that they are willing to establish a separate college for young women, as a branch of the University, provided an adequate sum be placed in their hands for construction and equipment of buildings and for maintenance of courses of instruction of equal grade with those in the College Department.

It is with no intention of indicating that such an Undergraduate Department is not needed, that I mention the fact that during the years which have elapsed since the above announcement was made a single contribution of one dollar is the only sum received for this purpose by the Trustees.

On the other hand the entire story of the connection of the University of Pennsylvania with the education of women seems to point to the action of to-day as its logical conclusion.

It is to Mrs Bloomfield Moore, in concert with my broad-minded and progressive predecessor, Provost Stillé, that the University owes the first fund for the education of women. In 1879 she gave the University, as a memorial to her husband,

the late Bloomfield Moore, Esq., a sum of \$10,000, the income of which should be used to aid such women students, not exceeding six in any one year, as might be studying at the University with the view of preparing themselves as teachers.

The benefits of this fund have been enjoyed by a considerable number of such students. Its existence has drawn attention to the fact that the University allowed certain special courses to be taken by women, although the only degree in the Undergraduate Department open to them was in the course in music. The decision as to whether complete co-education in the college should be permitted was forced on the Trustees some years ago, and, as already stated, it was decided to be inexpedient. Fortunately, the broader and higher work of the University, as distinguished from the College, began at the same time to be vigorously developed under the Faculty of Philosophy. It was unhesitatingly resolved that all post-graduate courses leading to the degree of Ph. D. should be at once opened to women students. It seemed obvious that this step was safe and judicious. The advantages of undergraduate courses can be secured at very many places; the facilities for advanced work are adequately developed only in a few great universities. The number of students applying for such work is not likely to be very large, and the applicants will be of exceptional character, capacity, and consistency of purpose. It is in this direction, moreover, that the current of educational progress in America so strongly trends.

We wish to preserve and to strengthen the College with all it has stood for in thorough foundation work, both for mind and character. We find it necessary to develop with this and over this, the University with its group of advanced courses, corresponding with and carrying forward the work of each undergraduate school. We need this in medicine, for example, as much as in mechanics. The Institute of Hygiene and the Wistar Institute of Anatomy and Biology will supplement in certain lines the undergraduate work in the Medical and Dental Departments. While, therefore, it is not the policy of our University to open to women the degrees in medicine or dentistry, all of the advanced graduate work in hygiene,

biology, and anatomy will be as freely open to them as to men, on the same conditions, and with the same degree of Ph. D. attached to success.

But it is here that the extreme practical value of Col. Joseph M. Bennett's action is made manifest. It is found in practice that this advanced work must be endowed even more fully than undergraduate work, if the most deserving and capable students are to be enabled to enter upon it after completing their undergraduate courses. Sadly often it is a matter of sheer financial impossibility for a young man or woman to secure the two years' added training in the larger and higher field of the great university which would make the difference between mediocrity and progressive excellence in all subsequent work. Our teachers, our journalists, our engineers, our doctors, are for the most part hurried into practical life without completed professional training. Col. Bennett felt the force of this, and in 1890 he tendered to the University two houses adjoining our property, to be used as a hall of residence for women students who shall be pursuing courses of graduate study here. The Trustees, in accepting this generous gift, the mere money value of which is about \$30,000, created the Graduate Department of Women, and ordered that it should be formally opened so soon as eight fellowships should be open to students, and a sufficient amount be secured towards endowment. In pursuance of the liberal policy which in every direction has yielded such excellent administrative results, they created a board of managers, composed of twenty members, of whom only seven are to be appointed by the Trustees from their own number, while, as regards the others, they retain the power of confirming the nominations of the board.

I am happy to be able to state that the requisite number of fellowships—eight—of an annual value of \$375, are now offered in this department for the year 1892-93, and also that I received yesterday from Col. Bennett this check for \$15,000 as a contribution to the endowment fund.

The total amount of endowment required to enable this new department to develop effectively, and to extend freely its advantages, will not be less than \$100,000.

The University of Pennsylvania here leads the way in a new field of educational work of the highest importance and significance. It marks an epoch in the history of the higher education of women; it has already incited to similar action in other quarters; it will exert most helpful influence upon the preparatory schools and smaller colleges for women; and it will enable us to feel that no longer can the reproach be made that the splendid facilities for original research and for advanced study in this great University—many of which are due to the generosity of women—are reserved exclusively for men.